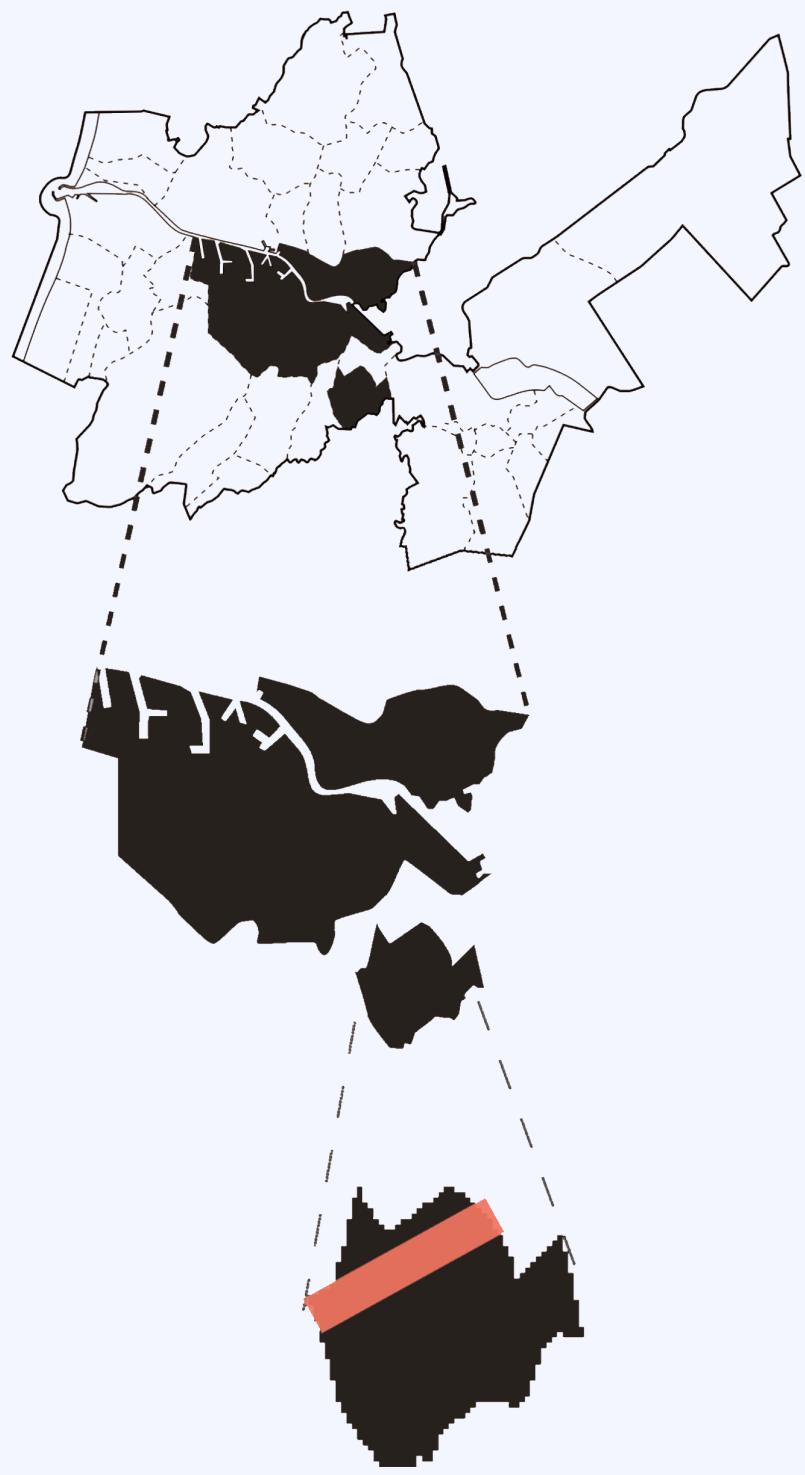
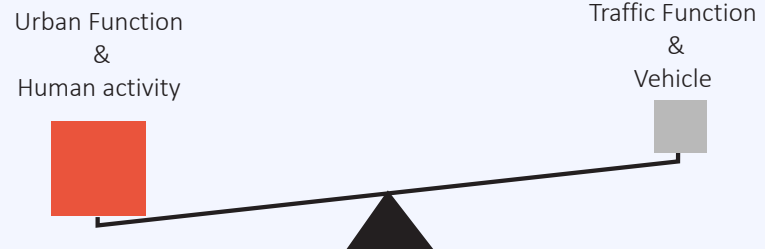


People-oriented Street Design

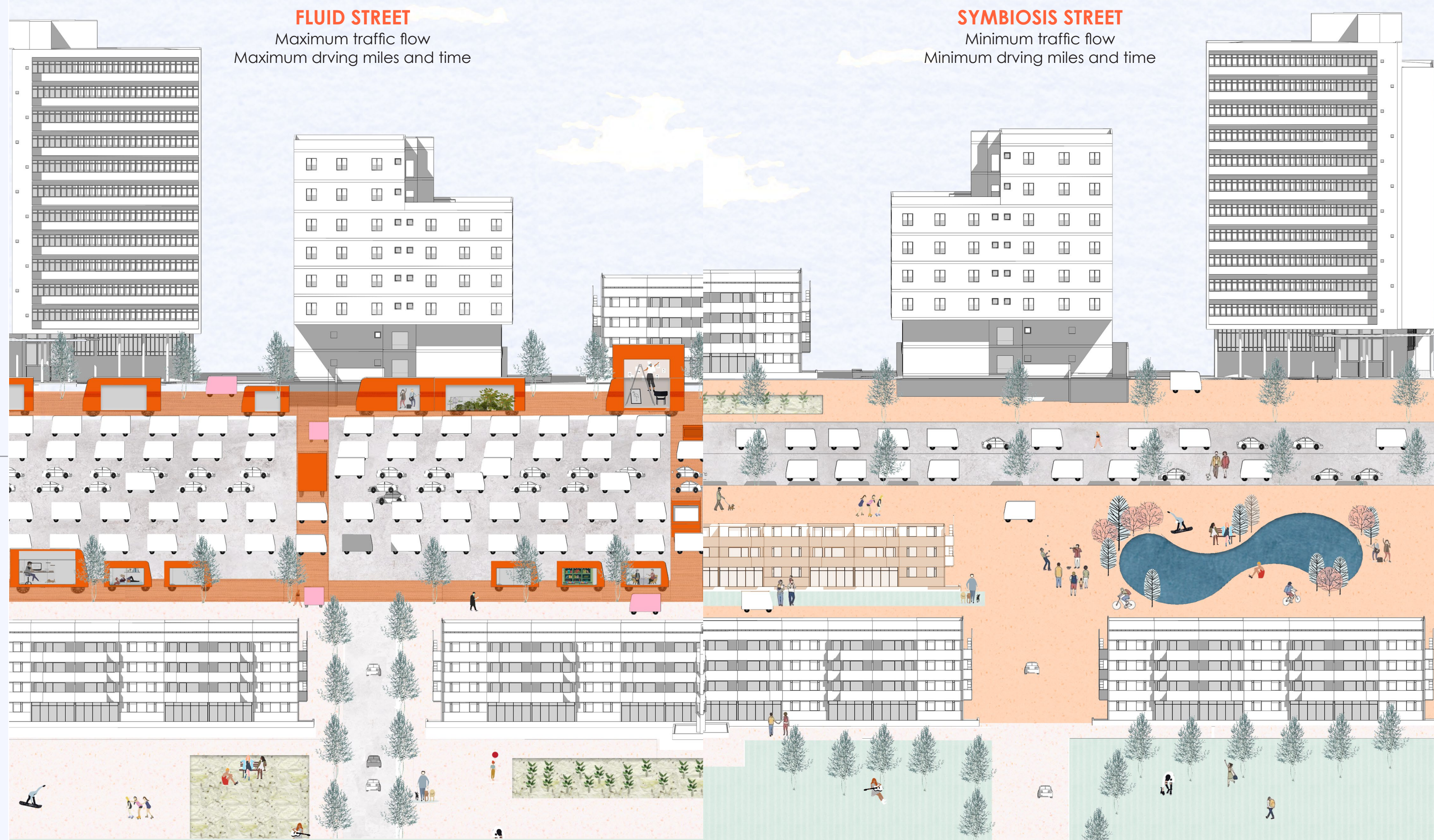
Transform street from spaces into places with Automated Vehicle as a trigger



Improving the quality of urban spaces has always been the central concern for the urban designers. Street as the typical type of public spaces comprises more than 80% of public space in cities, but they often fail to provide a space where people can safely walk, bicycle and socialize, this mainly because cars dramatically occupies most street spaces, street is no longer a social space but just traffic corridor. Automated vehicle as the new technological regime will allow organizing transport supply in a radically different way, especially when fully automated vehicle are applied. People will be released from driving and road infrastructure will also change. It is a huge opportunity to bring street back to more people-oriented design.

I choose Amsterdam-zuidoost, a typical area with low quality of street as my design target, trying to be an eye-opener to figure out **To what extent and in what way can automated vehicle be a trigger to transform automobile-oriented street into people-oriented street when 100% used.**

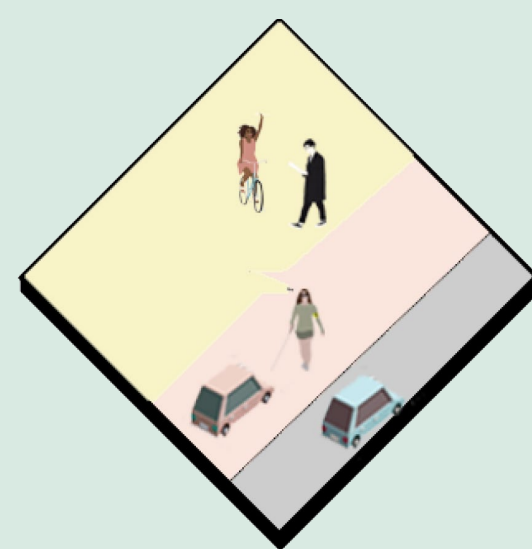
I build up my two extreme scenarios according to different policy, also street prototypes under these two scenarios. In **scenario 1, SYMBIOSIS STREET**, we can see a more vivid future street with diverse functions and activities, also more sustainable environment. If we lead to this condition, strict rules for AVs and our travel behavior should be accepted, apart from this, more taxes regarding travel miles, ownership will also be inevitable. On the other hand, we will have more efficient and convenient public transport system, more equal society and less social segregation. While this needs Top-down policy and cooperation of AV companies and everyone of us. In **scenario 2, FLUID STREET**, there will be freedom for everyone to choose their own way to travel, loose policy will encourage individual ownership and long travel miles and time on streets. To guarantee the efficiency and safety, there will be no more interactions between people and AVs, people will across street by cars, moving projects provide them with everything and space they need for daily life, their activities actually are restricted in cars, their neighborhoods and different buildings. This kind of new lifestyle makes people rely much more on vehicles, causing privacy and internet safety concerns, and it is unfair for people who cannot afford AVs and rely on public transportation. If we let AVs go, this is probably our future. And it is our choose to lead to which scenario.



SYMBIOSIS STREET ACTIVITY PROTOTYPE

Traffic function
--travel behavior

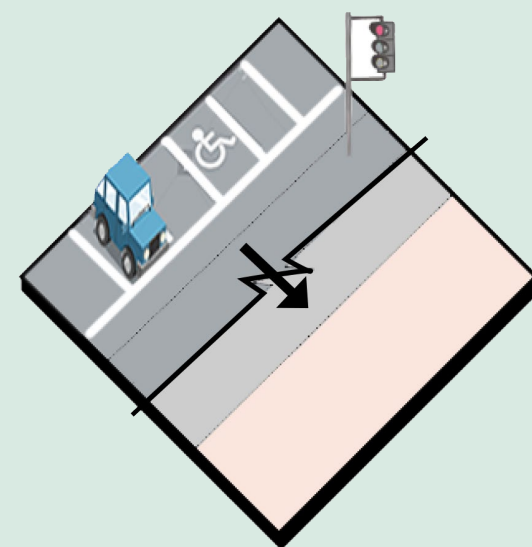
Urban function
--social behavior



Wider sidewalks



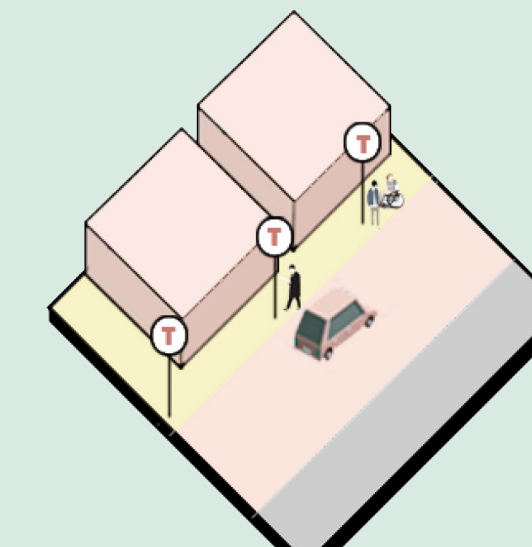
Accessible green&blue



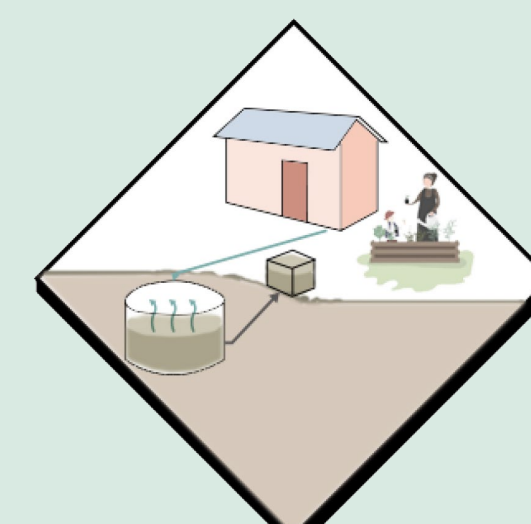
No parking on street



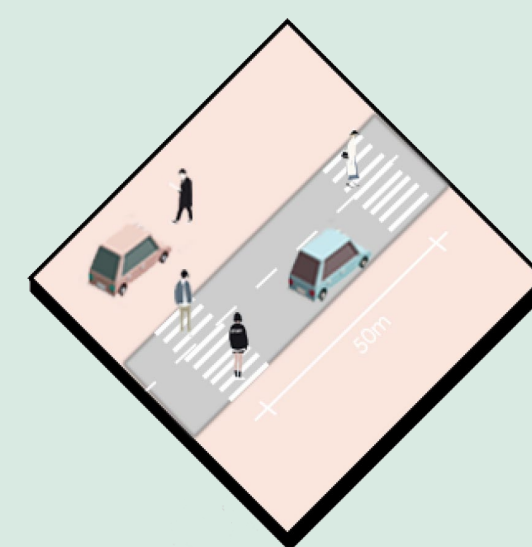
Social interaction space



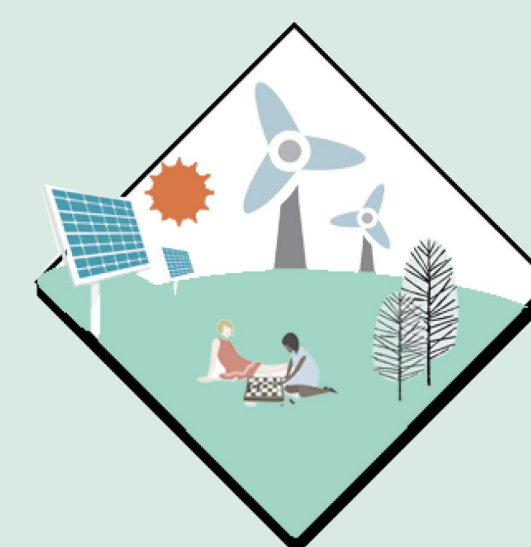
Transit stop per 50m



Urban farm & biomass



Flexible digital crossing



Clean energy



City center street



Highway transformation



Modern neighborhood street

- SYMBIOSIS STREET**
- Low Accessibility — High Accessibility
 - Low Permeability — High Permeability
 - Low quality of open space system — High quality of open space system
 - mono street function — Diverse street function
 - Low level of Active travel — High level of Active travel
 - Low level of Public transport — High level of Public transport
 - Low level of social interaction — High level of social interaction
 - Safety and Comfort — Safety and Comfort
 - Small amount of Traffic flow — Large amount of Traffic flow
 - Lack of street identity — Strong street identity
 - Low sense of community — High sense of community

- FLUID STREET**
- Low Accessibility — High Accessibility
 - Low Permeability — High Permeability
 - Low quality of open space system — High quality of open space system
 - mono street function — Diverse street function
 - Low level of Active travel — High level of Active travel
 - Low level of Public transport — High level of Public transport
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